

Spark YG™ 581 anti-human CD69

Catalog # / Size: 2154805 / 25 tests
2154810 / 100 tests

Clone: FN50

Isotype: Mouse IgG1, κ

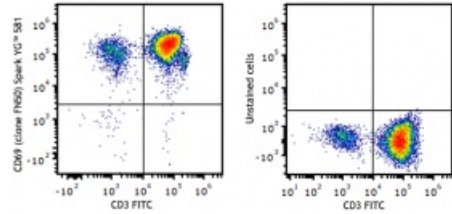
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Spark YG™ 581 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)

Workshop Number: IV A91

Concentration: Lot-specific



PMA+ionomycin activated human peripheral blood lymphocytes were stained with anti-human CD3 FITC and anti-human CD69 (clone FN50) Spark YG™ 581 (left), or stained with CD3 FITC only (right).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Spark YG™ 581 has a maximum excitation of 562 nm and a maximum emission of 581 nm.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections² and immunofluorescence microscopy³.

- Application References:**
1. Knapp WB, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
 2. Sakkas LI, *et al.* 1998. *Clin. and Diag. Lab. Immunol.* 5:430. (IHC)
 3. Kim JR, *et al.* 2005. *BMC Immunol.* 6:3. (IF)
 4. Verjans GM, *et al.* 2007. *P. Natl. Acad. Sci. USA* 104:3496.
 5. Lu H, *et al.* 2009. *Toxicol Sci.* 112:363. (FC) [PubMed](#)
 6. Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. (FC) [PubMed](#)
 7. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

Description: CD69 is a 27-33 kD type II transmembrane protein also known as activation inducer molecule (AIM), very early activation antigen (VEA), and MLR3. It is a member of the C-type lectin family, expressed as a disulfide-linked homodimer. Other members of this receptor family include NKG2, NKR-P1 CD94, and Ly49. CD69 is transiently expressed on activated leukocytes including T cells, thymocytes, B cells, NK cells, neutrophils, and eosinophils. CD69 is constitutively expressed by a subset of medullary mature thymocytes, platelets, mantle B cells, and certain CD4⁺ T cells in germinal centers of normal lymph nodes. CD69 is involved in early events of lymphocyte, monocyte, and platelet activation, and has a functional role in redirected lysis mediated by activated NK cells.

Antigen
References:

1. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
2. Testi R, *et al.* 1994. *Immunol. Today* 15:479.